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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,844	08/04/2003	Toshi Sacki	SUG-017-USA-P	5062

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TOWNSEND & BANTA
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MINNEAPOLIS, MN 55402

EXAMINER

HUSON, MONICA ANNE

ART UNIT	PAPER NUMBER
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1732

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/632,844		SAEKI ET AL.	
	Examiner		Art Unit	
	Monica A. Huson		1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-12 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) 14-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the RCE/Amendment filed 4 December 2006.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Bielfeldt (U.S. Patent 3,464,091). Regarding Claim 10, Bielfeldt shows that it is known to carry out an injection molding method (Abstract; it is noted that “low pressure” is a subjective limitation that can be interpreted broadly to include any number of ranges relative to other ranges), said method comprising moving an injection portion along a line of a plurality of vertically disposed resin supplying ports in communication with a cavity, while injecting molten resin from the injection portion into the vertically disposed resin supplying ports, so as to fill the cavity with molten resin via a plurality of injections (Figures 4-5, element 4a', 8a'; Column 4, lines 1-37), wherein the molten resin is sequentially injected into the resin supplying ports at low injection pressure by moving the injection portion from one vertically disposed resin supplying port to the next vertically disposed resin supplying port, thereby injecting molten resin to all vertically disposed resin supplying ports in a sequential manner (Column 4, lines 7-22; it is noted that “low pressure” is a subjective limitation that can be interpreted broadly to include any number of ranges relative to other ranges).

Regarding Claim 11, Bielfeldt shows the process as claimed as discussed in the rejection of Claim 10 above, including a method wherein, during injection of the molten resin into the cavity, said injection portion moves from a vertically disposed resin supplying port disposed at a low elevation end of the line of a plurality of vertically disposed resin supplying ports, to a vertically disposed resin supplying port disposed at an upper elevation end of the plurality of vertically disposed resin supplying ports (Column 4, lines 18-27; when the nozzle is finished with 8a', it moves upward to align itself with the next 7a' which arrives after rotation of the turntable).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bielfeldt, in view of Makinson et al. (U.S. Patent 4,124,343). Bielfeldt shows the process as claimed as discussed in the rejection of Claim 10 above, including a method wherein, upon termination of injection of the molten resin at the one resin supplying port, said injection portion moves to the next resin supplying port in the line of plurality of resin supplying ports (Column 1, lines 61-67; Column 2, lines 44-50). Bielfeldt does not specifically show using a detection sensor in the cavity. Makinson shows that it is known to carry out a method wherein the injection of said molten resin from said injection portion to one resin supplying port is terminated by a detection sensor in communication with the injection portion and disposed in a predetermined position of said cavity for detecting a charging amount of the molten resin (Column 5, lines 3-

29; Column 8, lines 31-46). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Makinson's sensor during Bielfeldt's molding method in order to avoid overfilling or underfilling of the mold cavity.

Response to Arguments

Applicant's arguments with respect to claims 10-12 have been considered but are moot in view of the new ground(s) of rejection.

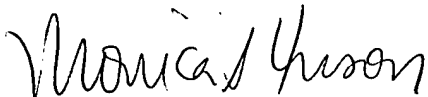
The examiner notes that the claim does not necessarily require a plurality of ports in communication with a *single* cavity.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Huson whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Monica A Huson

February 1, 2007